

**REMARKS/ARGUMENTS**

Reconsideration and continued examination of the above-identified application are respectfully requested.

By way of this amendment, claims 1-5 and 11-16 have been canceled. Claim 6 has been amended to include the limitations recited in canceled claim 1, and is now an independent claim. Claim 8 has been amended to further clarify the language of the claim as suggested by the Examiner. New claims 22 and 23 have been added. Full support for new claims 22 and 23 can be found at least in originally filed claims 4 and 5, as well as the present specification. Accordingly, no questions of new matter should arise and entry of the amendment is respectfully requested.

**Objection to claims 6 and 13-16**

At page 2 of the Office Action, the Examiner objects to claims 6 and 13-16.

In response, claims 13-16 are canceled. Claim 6 has been amended as requested by the Examiner.

The objection should be withdrawn.

**Rejection of claims 1-9 and 11-18 under 35 U.S.C. §112, second paragraph**

At pages 3 and 4 of the Office Action, the Examiner rejects claims 1-9 and 11-18 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The Examiner states that the language of the claim is unclear. The Examiner further rejects claim 2 and the claims dependent thereon. The Examiner states that the Examples in the application do not support the recitation in the claims that a cell adhesion factor is present in the medium. The Examiner also states that the

Examples only describe coating a culture dish with a cell adhesion factor. The Examiner also rejects claims 6 and 13-16 because the Examiner states that it is not clear which steps in the claims are necessary to prepare feeder cells for embryonic stem cells. The Examiner states that it is not clear whether the phrase “twenty or more times on average” in claims 9, 17, and 18 refers to the number of divisions within a single culture vessel or to the number of divisions in numerous culture vessels over time. This rejection is respectfully traversed.

By way of this amendment, claims 1-5 and 11-16 have been canceled, rendering the rejection of these claims moot. Claim 6 has been amended to further clarify the steps necessary to prepare feeder cells, and to further define the culture medium as originally defined in canceled claim 1.

Further, it is respectfully submitted that the phrase “twenty or more times on average” in claims 9, 17, and 18 refers to the number of divisions within a single culture vessel. As described in the present application, the proliferation step occurs in only “a culture vessel” (paragraphs [0019]-[0020]). As recited in claim 6, it is possible for several kinds of cells to be in a single culture vessel. It should also be understood, that in a single culture vessel, there are a number of cells that are cultured, and the cycle of the cell division is not precisely the same for all of the cells. However, if the total number of cells has duplicated, it can be concluded that cell division has occurred. Thus, the term “average” is used to refer to the “average” number of divisions for the several kinds of cells.

Accordingly, this rejection should be withdrawn.

**Rejection of claims 1, 4, and 5 under 35 U.S.C. §102(b) – Snodgrass**

At page 5 of the Office Action, the Examiner rejects claims 1, 4, and 5 under 35 U.S.C.

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§102(b) as being anticipated by Snodgrass (U.S. Patent Application Publication No. 2002/0012905).

The Examiner states that Snodgrass teaches a culture medium containing 0.4% bovine serum albumin, and between 0.1 and 100 µg insulin/ml medium in a basal medium such as RPMI 1640, Ham's F10, or Ham's F12 (paragraph 137). This rejection is respectfully traversed.

Claims 1, 4, and 5 have been canceled, rendering this rejection moot.

Accordingly, this rejection should be withdrawn.

**Rejection of claims 1-4, 6-9, 11-15, 17, and 18 under 35 U.S.C. §103(a) – Yamamoto et al. in view of Goodheart, Hook et al., Reich, and Benedict et al.**

At pages 6-9 of the Office Action, the Examiner rejects claims 1-4, 6-9, 11-15, 17, and 18 under 35 U.S.C. §103(a) as being obvious over Yamamoto et al. (U.S. Patent Application Publication No. 2002/0031828) in view of Goodheart (U.S. Patent Application Publication No. 2004/0023322), Hook et al. (U.S. Patent Application Publication No. 2004/0214282), Reich (U.S. Patent No. 4,973,466), and Benedict et al. (U.S. Patent No. 5,108,923). The Examiner states that Yamamoto et al. teaches a method for culturing 3T3 mouse embryonic lung fibroblasts in a medium containing fetal bovine serum (paragraph [0030] and that feeder layers may be yielded by sterilizing the fibroblasts by irradiation or addition of mitomycin C (paragraph 3). The Examiner states that Yamamoto et al. does not teach a medium containing the claimed amounts of BSA and insulin, does not specifically suggest using the basal media listed in claim 1, does not teach culturing lung fibroblasts in a system containing collagen, and does not indicate how many divisions the 3T3 cells should undergo prior to being inactivated. The Examiner relies on the secondary references to overcome the noted deficiencies. This rejection is respectfully traversed.

The claimed invention provides culture media for preparation of feeder cells that does not use fetal bovine serum. As stated in the present application, culture media using fetal bovine

serum can cause infection and spread of pathogens (paragraph [0007]). Unlike the claimed invention, Yamamoto et al. requires fetal bovine serum. The Examiner suggests that one of ordinary skill in the art would be prompted to substitute BSA for the fetal bovine serum described in Yamamoto et al., given the teachings of Goodheart and Hook et al. However, contrary to the Examiner's suggestion, neither Goodheart nor Hook et al. teach or suggest that BSA can be a substitute for the fetal bovine serum described in Yamamoto et al. There is also no teaching or suggestion in Yamamoto et al. to make the substitution proposed by the Examiner.

Also, Hook et al. is not prior art to the present application. The passages in Hook et al. upon which the Examiner relies, appear not to be present in the provisional application of Hook et al. Thus, the provisional filing date cannot be relied upon for this rejection. The non-provisional filing date of Hook et al. (April 23, 2004) does not pre-date the Japanese priority date of the present application, which is February 13, 2004. As such, at least with respect to the passages relied upon by the Examiner, Hook et al. does not pre-date the present application. A certified English language translation of the Japanese priority document is submitted with this response.

Accordingly, this rejection should be withdrawn.

**Rejection of claims 5 and 16 under 35 U.S.C. §103(a) – Yamamoto et al. in view of Goodheart, Hook et al., Reich, Benedict et al., and further in view of Tang et al.**

At pages 9-10 of the Office Action, the Examiner rejects claims 5 and 16 under 35 U.S.C. §103(a) as being obvious over Yamamoto et al. (U.S. Patent Application Publication No. 2002/0031828) in view of Goodheart (U.S. Patent Application Publication No. 2004/0023322), Hook et al. (U.S. Patent Application Publication No. 2004/0214282), Reich (U.S. Patent No.

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4,973,466), and Benedict et al. (U.S. Patent No. 5,108,923) and further in view of Tang et al. (U.S. Patent Application Publication No. 2004/0059098). The Examiner relies on the teachings of Yamamoto et al., Goodheart, Hook et al., Reich, and Benedict, for the reasons explained above. The Examiner further states that Tang et al. teaches that EGF promotes proliferation of human lung fibroblasts. This rejection is respectfully traversed.

Claims 5 and 16 have been canceled, rendering this rejection moot.

Accordingly, this rejection should be withdrawn.

**Rejection of claim 1 under 35 U.S.C. §103(a) – Yamamoto et al. in view of Goodheart, Hook et al., Reich, Benedict et al., and further in view of Wei et al.**

At page 10 of the Office Action, the Examiner rejects claim 1 under 35 U.S.C. §103(a) as being unpatentable over Yamamoto et al. (U.S. Patent Application Publication No. 2002/0031828) in view of Goodheart (U.S. Patent Application Publication No. 2004/0023322), Hook et al. (U.S. Patent Application Publication No. 2004/0214282), Reich (U.S. Patent No. 4,973,466), and Benedict et al. (U.S. Patent No. 5,108,923) and further in view of Wei et al. (U.S. Patent Application Publication No. 2003/0017485). The Examiner relies on the teachings of Yamamoto et al., Goodheart, Hook et al., Reich, and Benedict, for the reasons explained above. The Examiner further states that Wei et al. teaches a suitable culture media for mammalian cells. This rejection is respectfully traversed.

Claim 1 has been canceled, rendering this rejection moot.

Accordingly, this rejection should be withdrawn.

**CONCLUSION**

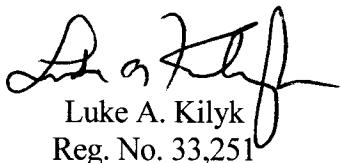
In view of the foregoing remarks, the applicant respectfully requests the reconsideration of

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this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. §1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



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Certified English translation of Japanese priority document